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EXAMINER

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2624

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 28

Application Number: 09/151,321
Filing Date: September 11, 1998
Appellant(s): YOSHIDA, EIICHI

Kathy E. Needleman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/13/2003.

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(1) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(2) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(3) Summary of Invention

The summary of invention contained in the brief is correct.

(4) Issues

The appellant's statement of the issues in the brief is correct.

(5) Grouping of Claims

Appellant's brief includes a statement that claims do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

Applicant provides: Issue No. 1 with the grouping of: (1) claims 1, (2) claims 11-15, 19 and (3) claims 16, 20; Issue No. 2 with the grouping of claims 1 and 6-10; Issue No. 3 with the grouping of claims 2-5, 18; Issue No. 4 with the grouping of (1) claims 11, 15, and 19, (2) claims 16 and 20; Issue No. 5 with the grouping of claims 12-14.

(6) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(7) Prior Art of Record

5,467,434	Hower, Jr. et al.	11-1995
6,088,120	Shibusawa et al.	7-2000
5,768,483	Maniwa et al.	6-1998

(8) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

This rejection is set forth in prior Office Action, Paper No. 18.

Claims 11-16 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For at least amended claim 11 with a new limitation “ ... such that the job management device can determine whether or not to route an input job having a specific mode to the image forming apparatus based on whether any of the jobs stored in the memory has the specific mode of the input job.” and “ for amended claim 16 with a new limitation “ wherein when said input job has a specific mode, said control device selects an image forming apparatus whose memory stores a job having the specific mode of the input job”. These above limitations of both claims recite a server selects an image forming apparatus based on jobs stored in a memory of the image forming apparatus having the specific mode of the input job. However, lines 7-10 and 14-19 in page 18 in the specification, a server 6 just select a printer based on stored jobs in hard disk 206 of the server, not a memory of the printer, and printer status.

However, the Examiner cites the prior arts for rejection based on the limitations of the claims.

Claims 1 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hower (US Patent No. 5,467,434) and Shibusawa et al. (US Patent No. 6,088,120) and Maniwa et al. (US Patent No. 5,768,483).

As to claim 1, Hower teaches that a device (25 in fig. 2) for selecting a network-connected image forming apparatus from a plurality of network-connected image forming apparatus (one of printers is selected by the server 25 in fig. 2), the device comprising:

a controller (a server 25 in fig. 2) for selecting one of image forming apparatuses (a plurality of printers from 12-1 to 12-N in fig. 2) connected with the network,

wherein when an input job (i.e., job ticket 35 in fig. 2) has a specific mode (i.e., the properties of the printer: tray, finishing, stock, type of page described in fig. 3 and 5; col.4, lines 5-10) , the controller selects an image forming apparatus which has the specific mode at the time the selection is made (note: after the job ticket or the combination of print job selections from the host computer is matched with printer properties provided in one of the stored printer profiles, in col. 4, lines 52-55, then one of the print profiles is selected , in col. 4, lines 55-61, finally one of printers is selected based on the selected one of printer profile, in col. 4, lines 33-37; print job is formed and including the property of the printer and also including the selected printer, col. 4, line 65 to col. 5, line 2);

said controller registers the input job in the selected image forming apparatus (note: a server transmits the job ticket to the selected printer for printing after combining job ticket and print data into a job file col. 4, line 65 to col. 5, line 6).

However, Hower does not teach each of at least two of printers has a specific mode.

Shibusawa also teaches a server for selecting one of printers (col. 1, lines 43-45) in which each of at least two of printers has a specific mode (see fig. 4, a printer a and b have a specific mode: top-tray).

It would have been obvious to modify the printing system of Hower to have each of at least two of printers has a specific mode as taught by Shibusawa. The suggestion for modifying the system of Hower can be reasoned by one of ordinary skill in the art as set forth by Shibusawa because Shibusawa provides a server for selecting one of printers based on the attribute information from a user and controlling print job to the selected printer.

Although neither Hower nor Shibusawa teach a printer stores its own information such as properties, it would have been obvious in order for each of printers which has its own properties and which stores its own properties in the printer because the printer uses its own properties to perform the printing based on the commands from either the computer or a server. Thus, one or more properties being stored in the selected printer should be matched with the properties of selected printer in the server, so that the selected printer uses its own properties to perform the printing based on the commands from the server. Furthermore, Maniwa teaches an image forming apparatus comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8, note, in fig. 8; col. 21, lines 1-15, scan profile of digital copier 102 and scan profile of the server 104 are matched each other).

It would have been obvious to modify the printing system of either Hower or Shibusawa for having and storing one or more profiles in the output device as taught by Maniwa. The suggestion for modifying the system of either Hower or Shibusawa can be reasoned by one of ordinary skill in the art as set forth by Maniwa because Maniwa teaches the controller of the

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server easily controls the system when the profile of server and the output devices are exchanged each other.

As to claim 6, Maniwa teaches controller selects an image forming apparatus not storing a specific mode job when the job is not a specific mode (col. 18, lines 60-65).

As to claim 7, Maniwa teaches the controller selects an image forming apparatus not storing a job when an image forming apparatus storing a specific mode job cannot be referenced (col. 18, lines 60-65).

As to claim 8, Maniwa teaches controller selects an image forming apparatus having the greatest remaining memory when an image forming apparatus storing no job cannot be referenced (col. 18, lines 60-65).

As to claim 9, Maniwa teaches the controller receives information from an image forming apparatus regarding the size of paper attached to the image forming apparatus (in fig. 8, profiles from a server and a copier are the same) and selects an image forming apparatus storing a specific mode job and registers a job in the selected image forming apparatus (col. 17, lines 60-65) when no image forming apparatus has a paper suitable for the job (col. 18, lines 60-65).

As to claim 10, Maniwa teaches notice means (NIC 106 and Message to WS 103 in fig. 5) for notifying to set a paper (col. 25, line 5) using the job to the selected image forming apparatus.

Claims 2-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hower (US Patent No. 5,467,434), Shibusawa (US Patent No. 6,088,120) and Applicant's admitted prior art.

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As to claims 2-5 and 18, the combination of Hower and Shibusawa teaches the main feature in claim 1 as indicated above except a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper.

Applicant's admitted prior art teaches features which are well known such as a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper (page 2 line 18 to page 3, line 4).

It would have been obvious to modify the printing system of Hower and Shibusawa to have a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper as taught by Applicant's admitted prior art. The suggestion for modifying the system of Hower and Shibusawa can be reasoned by one of ordinary skill in the art as set forth by Applicant's admitted prior art because Applicant's admitted prior art provides the well known features including the optional modes such as temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding to the properties of Hower and Shibusawa. Therefore, the more properties to the printing system the more flexible to allow the server can select one of printers.

Claims 11, 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hower (US Patent No. 5,467,434) and Maniwa (US Patent No. 5,768,483).

As to claim 11, Hower teaches:

a server for determining to route a input job (a job ticket) having a specific mode (printer property) to the image forming apparatus based on any of the jobs stored in the memory has the specific mode of the input job (note: after the job ticket or the combination of print job selections from the host computer is matched with printer properties provided in one of the stored printer profiles, in col. 4, lines 52-55, then one of the print profiles is selected , in col. 4, lines 55-61, finally one of printers is selected based on the selected one of printer profile, in col. 4, lines 33-37).

Although Hower does not teach the printer having reporting means for reporting the status of memory that indicates a specific mode in the stored job to the server, Hower teaches the server already stores a plurality of modes of each of printers in the profile. Therefore, the printers provide the specific mode to a server, which is well known in the prior art. Furthermore, Maniwa also teaches an image forming apparatus comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8); and reporting means for reporting the status of memory of the output device to a server (in fig. 8; col. 21, lines 1-15; note: scan profile of digital copier 102 and scan profile of the server 104 are copied each other. Therefore, the output device has means for reporting the status of print profile in the memory to the MFS.NLM of the server).

It would have been obvious to modify the system of Hower for reporting the profile in a memory of the output device to a server as taught by Maniwa. The suggestion for modifying the system of Hower can be reasoned by one of ordinary skill in the art as set forth by Maniwa because Maniwa teaches the controller of the server easily controls the system when the profile of server and the output devices are exchanged each other.

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As to claim 15, Maniwa teaches image forming means for forming images on recording medium in order of the sequence of jobs stored in the memory (fig. 5).

As to claim 16, Hower teaches:

A network for transmitting data (see fig. 1);

A control device (25 in fig. 2) for selecting one of the plurality of image forming apparatus connected (a plurality of printers from 12-1 to 12-N in fig. 2) with the network and for registering an input job in the selected image forming apparatus (note: a server transmits the job ticket to the selected printer for printing after combining job ticket and print data into a job file col. 4, line 65 to col. 5, line 6),

wherein when the input job (i.e., job ticket 35 in fig. 2) has a specific mode (i.e., the properties of the printer: tray, finishing, stock, type of page described in fig. 3 and 5; col. 4, lines 5-10), the control device selects an image forming apparatus whose memory stores a job having the specific mode of the input job (note: after the job ticket or the combination of print job selections from the host computer is matched with printer properties provided in one of the stored printer profiles, in col. 4, lines 52-55, then one of the print profiles is selected, in col. 4, lines 55-61, finally one of printers is selected based on the selected one of printer profile, in col. 4, lines 33-37).

the motivation of this claim is applied as in the motivation of claim 11.

As to claims 19-20, Hower teaches the specific mode of the prior job stored in the image forming apparatus can be a manual paper-feeding mode (because properties of the printers can include a manual paper feeding mode).

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Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hower (US Patent No. 5,467,434), Maniwa (US Patent No. 5,768,483) and Applicant's admitted prior art.

As to claims 12-14, the combination of Hower and Maniwa teaches the main feature in claim 1 as indicated above except a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper.

Applicant's admitted prior art teaches features which are well known such as a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper (page 2 line 18 to page 3, line 4).

It would have been obvious to modify the printing system of Hower and Maniwa to have a mode for temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding, or notify a user to place an indicated type of paper as taught by Applicant's admitted prior art. The suggestion for modifying the system of Hower and Maniwa can be reasoned by one of ordinary skill in the art as set forth by Applicant's admitted prior art because Applicant's admitted prior art provides the well known features including the optional modes such as temporarily stopping the image forming apparatus in order to exchange sheets or change paper in a manual paper feeding to the properties of Hower and Maniwa. Therefore, the more properties to the printing system the more flexible to allow the server can select one of printers.

(9) Response to Argument

With respect to the first paragraph of 35 U. S. C. 112 rejection:

Appellants argued on pages 13 and 15 of the Brief that “discriminating means (CPU 102) for discriminating whether any of the jobs stored in the memory has a specific mode in order to determine a status of the memory; and reporting means (network controller 101) for reporting the status of the memory to the job management device (6) such that the job management device (6) can determine whether or not to route an input job having a specific mode to the image forming apparatus based on whether any of the jobs stored in the memory has the specific mode of the input job (as illustrated in Fig. 3 and described on page 13, lines 3-7 of the specification, network controller 101 controls interactions between devices). Thus, all elements of claims 11 and 16 are supported by the specification in a manner such that one skilled in the art would find the disclosure enabling of claims 11 and 16”. The argument has been fully considered but is not deemed to be persuasive because of the following reasons:

1) the limitation of “ discriminating whether any of the jobs stored in the memory has a specific mode in order to determine a status of the memory”, which is performed by discriminating means (CPU 102) in claims 11 and 16, is not described in fig. 3 and page 13, line 3-7 of the specification; and

2) the limitation of “reporting the status of the memory to the job management device (6) such that the job management device (6) can determine whether or not to route an input job having a specific mode to the image forming apparatus based on whether any of the jobs stored in the memory has the specific mode of the input job” , which is performed by reporting means

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(network controller 101) in claims 11 and 16, is not described in fig. 3 and page 13, line 3-7 of the specification.

The figure 3 just merely shows discriminating means (i.e., CPU 102) and reporting means (i.e., network controller 101) and page 13, lines 3-7 just describes that “ CPU 102 controls the aforementioned image controller 100 according to a program stored in ROM 103. Image controller 100 is connected to network N, and handshaking with other devices is performed via network controller 101”. Therefore, discrimination means (CPU 102) and reporting means (network controller 101) fail to perform the limitations those are cited in claims 11 and 16. Furthermore, the figure 3 and page 13, line 3-7 of the specification fail to describe how the image forming apparatus receives the input job information from the job management device (6) and if a plurality of image forming apparatuses have the jobs containing the same specific mode, then how the job management device (6) determines whether or not to route an input job to one of the image forming apparatuses.

With respect to 35 U. S. C. 103 (a) rejection:

Appellants argued on page 17 of the Brief that “ Claim 1 requires that ‘ when an input job has a specific mode, said controller selects an image forming apparatus which has a specific mode and which stores a prior job having the specific mode of the input job at the time the selection is made, and said controller for registering the input job in the selected image forming apparatus’. None of the above cited references either alone or in any combination disclose or suggest that a controller select a printer based on whether or not a printer stores a prior job having the specific mode of the input job.” and on page 18 of the Brief that “ As discussed previously, neither Hower or Shibusawa, either alone or in combination, disclose or suggest that

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a controller select a printer based on whether or not a printer stores a prior job having the specific mode of the input job". The argument has been fully considered but is not deemed to be persuasive because of the following reasons:

1) Hower clearly teaches that:

a) when an input job (i.e., job ticket 35 in fig. 2) has a specific mode (i.e., quantity, enlargement, reduction, stock, finishing. It is noted that, with respect to col. 4, lines 4-10, job ticket 35 permits the user to program a print job, which includes image data and job ticket, for transmission to the server 25. Job ticket 35 contains the programming parameters for the job such as quantity, enlargement, reduction, stock, finishing those are specific modes. In one example, electronic documents 39, which include the information that is ultimately printed on print media, is transmitted from the client 15-1 to the server 25), then

b) the controller (i.e., a server 25 in fig. 2) selects an image forming apparatus which has a specific mode in a prior job at the time the selection is made (it is noted that the job ticket, which is included in a print job and is transmitted to the server from the host computer, is compared at the server with printer properties, which are specific modes such as quantity, enlargement, reduction, stock, finishing, stored in one of the printer profiles at the server, col. 4, lines 52-55. The printer properties are stored in the profiles before in the server. Thus, The printer properties would be considered as the prior job which have a specific mode of the printer. After comparing between the specific mode from the job ticket and the specific mode from the printer profiles by the combination examiner 37, one of the print profiles is selected, in col. 4, lines 55-61; and finally one of printers is selected based on the selected one of printer profile (or a specific mode stored in the printer profile), in col. 4, lines 33-37. The server for registering the

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input job (i.e., job ticket) in the selected printer by transmitting the print job (the print job includes a job ticket and print data) to a printer for printing, col. 4, line 65 to col. 5, line 2).

2) However, Hower fails to teach the printer for storing a prior job having a specific mode. Maniwa teaches an image forming apparatus (i.e., digital copier system 102 in fig. 8) comprising a memory for storing a prior job (i.e., print profiles 1-n in fig. 8 which are stored before; the prior job or a print profile contains a plurality of specific modes which is listed on table 8 in col. 19, lines 15-45) and provides a prior job includes a plurality of specific modes to the server 104 via LAN (please see an arrow between the profiles of the server and the profiles of the copier in fig. 8; col. 21, lines 1-15). The above limitation in Maniwa would modify to the deficiency of Hower.

Appellants argued on page 20 of the Brief that “... none of the cited references discloses or suggests discriminating whether any of the jobs stored in the memory of the printer is a specific mode job or determining whether or not to route an input job having a specific mode to a printer based on whether that printer stores other jobs having the specific mode of the input job. Therefore, claim 11 is not obvious with respect to the cited prior art references, either singly or in any combination”. The argument has been fully considered but is not deemed to be persuasive because Hower teaches a server (i.e., 25 in fig. 2) for determining to route a input job (the job ticket is included in print job) having a specific mode (i.e., quantity, enlargement, reduction, stock, finishing. It is noted that, with respect to col. 4, lines 4-10, job ticket 35 permits the user to program a print job, which includes image data and job ticket, for transmission to the server 25. Job ticket 35 contains the programming parameters for the job such as quantity, enlargement, reduction, stock, finishing those are specific modes. In one example, electronic documents 39,

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which include the information that is ultimately printed on print media, is transmitted from the client 15-1 to the server 25) to the selected printer based on any of the specific mode stored in the printer profiles has the specific mode of the input job (it is noted that after the job ticket or the combination of print job selections from the host computer is matched with printer properties provided in one of the stored printer profiles, in col. 4, lines 52-55; then one of the print profiles is selected, in col. 4, lines 55-61; and finally one of printers is selected based on the selected one of printer profile, in col. 4, lines 33-37).

However, Hower does not teach the printer having reporting means for reporting the status of memory that indicates a specific mode in the stored job to the server. Maniwa teaches an image forming apparatus (i.e., a copier 102 in fig. 8) comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8); and reporting means (i.e., NIC 106 in fig. 5) for reporting the status of memory of the output device to a server (in fig. 8; col. 21, lines 1-15 describes that scan profile of digital copier 102 and scan profile of the server 104 are copied each other and the copier device has reporting means "NIC 106 in fig. 5" for reporting the status of print profile in the memory to the MFS.NLM of the server).

Appellants argued on page 22 of the Brief that none of cited references discloses or suggests the limitations in claim 16. The argument has been fully considered but is not deemed to be persuasive because Hower teaches a network for transmitting data (27 on the network system 10 in fig. 1); a control device (i.e., a server 25 in fig. 2) for selecting one of the plurality of image forming apparatus connected (a plurality of printers from 12-1 to 12-N in fig. 2) with the network and for registering an input job (i.e., a job ticket 35 in fig. 2) in the selected image forming apparatus (note: a server transmits the job ticket to the selected printer for printing after

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combining job ticket and print data into a job file col. 4, line 65 to col. 5, line 6), wherein when the input job (i.e., job ticket 35 in fig. 2) has a specific mode (i.e., quantity, enlargement, reduction, stock, finishing. It is noted that, with respect to col. 4, lines 4-10, job ticket 35 permits the user to program a print job, which includes image data and job ticket, for transmission to the server 25. Job ticket 35 contains the programming parameters for the job such as quantity, enlargement, reduction, stock, finishing those are specific modes. In one example, electronic documents 39, which include the information that is ultimately printed on print media, is transmitted from the client 15-1 to the server 25), the control device selects an image forming apparatus whose memory stores a job having the specific mode of the input job (it is noted that after the job ticket or the combination of print job selections from the host computer is matched with printer properties provided in one of the stored printer profiles, in col. 4, lines 52-55; then one of the print profiles is selected, in col. 4, lines 55-61; and finally one of printers is selected based on the selected one of printer profile, in col. 4, lines 33-37). However, Hower does not teach the printer having reporting means for reporting the status of memory, which indicates a specific mode in the stored job to the server. Maniwa teaches an image forming apparatus (i.e., a copier 102 in fig. 8) comprising a memory for storing jobs (i.e., print profiles 1-n in fig. 8); and reporting means (i.e., NIC 106 in fig. 5) for reporting the status of memory of the output device to a server (in fig. 8; col. 21, lines 1-15 describes that scan profile of digital copier 102 and scan profile of the server 104 are copied each other and the copier has "NIC 106 in fig. 5" for reporting the status of print profile in the memory to the MFS.NLM of the server).

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

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March 20, 2003

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